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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/660,930	09/12/2003	John Coogan	98103.00016	7313

7590 06/21/2005

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EXAMINER	
BERMAN, JACK I	

ART UNIT	PAPER NUMBER
2881	

DATE MAILED: 06/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

Office Action Summary	Application No.	Applicant(s)	
	10/660,930	COOGAN, JOHN	
	Examiner	Art Unit	
	Jack I. Berman	2881	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 April 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15,17 and 18* is/are rejected.

7)☒ Claim(s) *16* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *12 September 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1, 5-7, 9, 13-15, 17, and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Cimino et al. Cimino et al. discloses a non-laser light source assembly adapted to supply light energy when said light source is energized comprising

a) a housing (either the top or bottom portion of housing 100) defined by at least one outer wall, said at least one outer wall defining an outer face and inner face;

b) a light source (any one of bulbs 101) removably positioned within said housing;

c) means for energizing said light source (see lines 41-45 in column 17);

d) a bounded volume of photon-producing gas (the fluorescent bulbs used by Cimino et al. inherently constitute bounded volumes of photon-producing gas because they are by definition hermetically sealed, i.e. bounded, and contain a gas that fluoresces, i.e. produces photons, when stimulated by an electrical discharge) positioned within said housing;

wherein at least a portion of said outer wall (transparent plate assemblies 103, 104) is substantially transparent to photons produced by said bounded volume of gas, said substantially transparent portion of said outer wall being temperature-controlled through direct contact of a cooling fluid (since air blows across the bulbs to cool them, as is explained at lines 55-59 in column 14, it inherently contacts the inner face of bottom plate 104B of the lower plate assembly 104 covering the bottom portion of the housing 100 and the inner face of upper plate 103A of the upper plate assembly 103 covering the upper portion of the housing 100 since these plates define the boundaries of the chambers containing the bulbs 101) with the inner face thereof. A treatment fluid consisting of blood products (see abstract) contained within a container (102) that is substantially transparent to ultraviolet radiation is positioned adjacent the outer face of the substantially transparent portion of the outer wall (transparent plate assemblies 103, 104) of the Cimino et al. apparatus and the photons generated by the light sources (101) pass through the cooling fluid (blowing air) that is in direct contact with the inner face of the outer wall through the substantially transparent portion (transparent plate assemblies 103, 104) to treat this fluid. The Cimino et al. apparatus also comprises reflective surfaces (108A, 108B) associated with the housing to direct photons produced by the bounded volumes of gas of the bulbs (101) toward the substantially transparent portions of the outer wall (transparent plate assemblies 103, 104). The frames of Cimino et al.'s transparent plate assemblies, which are not labeled in the drawings, inherently constitute flanges for mounting the substantially transparent portions of the outer walls to the non-transparent portions and each of the transparent plate assemblies (103, 104) is defined by a plurality of substantially transparent panels (103A, 103B, 104A, 104B) that are mounted with respect to the non-transparent portions of the outer wall by these flanges.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2-4, 8, 11, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cimino et al. in view of von Arx et al. While Cimino et al. uses fluorescent bulbs as the light sources in the preferred embodiment, the apparatus disclosed is not limited to this particular type of light source. Von Arx et al. teaches in the "Discussion of Background" that this type of light source can only emit high intensity ultraviolet radiation by distributing the radiation over a large wavelength range, so when a narrow wavelength range is required, it is advantageous to use an excimer radiator. At line 41 in column 4, von Arx et al. teaches that it is known in the art to use XeCl as the photon producing gas in such an excimer laser to produce a wavelength between 300 and 320 nm. Since Cimino et al. teaches that a narrow wavelength range is required to treat the blood products, as is discussed at lines 11-45 in column 11, it would have been obvious to a person having ordinary skill in the art to substitute the excimer radiators discussed by von Arx et al. for Cimino et al.'s fluorescent bulbs in order to achieve the substantially monochromatic emission taught by von Arx et al. Von Arx et al. also teaches, at lines 17-23 in column 2, that quartz is substantially transparent to ultraviolet radiation, so it would have been obvious to a person having ordinary skill in the art to make Cimino et al.'s transparent panels (103A, 103B, 104A, 104B) of quartz in order to transmit the ultraviolet radiation emitted by the light sources. Von Arx et al. also teaches, as is illustrated in Figure 9, to make large area radiators by mounting a plurality of transparent panels in a flange (metal section 19a) and using this flange, which

constitutes a housing and the sections between the channels (33) constitute cross beams, as a ground for the light source. It would have been obvious to a person having ordinary skill in the art to use the von Arx et al. multi-panel radiator as Cimino et al.'s light sources in order to take advantage of the ease of manufacture discussed by von Arx et al.

Claim 16 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: There is no suggestion in the prior art to use the cooling fluid that has passed in direct contact with the inner face of the outer wall of a housing containing light sources that include bounded regions for cooling fluid through these bounded regions after the fluid has contacted the outer wall.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

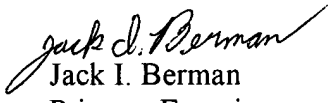
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jack I. Berman whose telephone number is (571) 272-2468. The examiner can normally be reached on M-F (8:30-6:00) with every second Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Lee can be reached on (571) 272-2477. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jack I. Berman
Primary Examiner
Art Unit 2881

jb
6/16/05